ADULT SEX OFFENDERS ON COMMUNITY SUPERVISION

A Review of Recent Assessment Strategies and Treatment

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Sex offenders present challenges to treatment providers and probation officers. This article reviews recent developments in assessing risk and gauging their treatment progress. Probation departments in many jurisdictions have recently created specialized sex offender programs that provide intensive supervision and treatment. This article also reviews studies that have carefully evaluated these new probation strategies. In addition, it surveys the literature on treatment effectiveness and the predictors of treatment failure. Finally, the current article discusses directions for future research and implications for professional practice.

Keywords: sex offenders; specialized probation; sex offender treatment; risk assessment

Sex offenders are one of the most difficult groups of offenders to treat and supervise in the community. Estimates indicate that about 234,000 convicted sex offenders are under the care, custody, or control of corrections agencies in the United States on any average day. Of these offenders, almost 60% are under conditional supervision in the community (Greenfeld, 1997). Given that many sex offenders are sentenced to probation and reside in the community, it is important to determine which supervision and treatment strategies are effective

AUTHOR NOTE: *The author would like to thank Arthur Lurigio and Amie Gates for their constructive comments on an earlier draft. Correspondence concerning this article should be addressed to Loretta J. Stalans, Department of Criminal Justice, Loyola University, 820 N. Michigan Avenue, Chicago, Illinois 60611.*

CRIMINAL JUSTICE AND BEHAVIOR, Vol. 31 No. 5, October 2004 564-608
DOI: 10.1177/0093854804267093

at reducing sexual, violent, and general recidivism. This article provides a comprehensive review of probation and treatment strategies and the effectiveness of such efforts at reducing recidivism. It is divided into five major sections. The first section is a review of the different treatments for sex offenders. The second section reviews the literature on the effectiveness of treatment, including predictors of which sex offenders are most likely to be noncompliant with treatment. The third section is a discussion of critical concepts that should be carefully assessed to determine risk of sexual recidivism and standardized instruments to measure sexual recidivism and treatment progress. The fourth section reviews studies that have used comparison groups to evaluate specialized probation programs for sex offenders. The final section summarizes the major conclusions from the literature and describes areas that need further research as well as possible probation strategies that should be evaluated in the future.

SEX OFFENDER TREATMENT

A description of sex offender treatment is available in many countries, including Belgium (Cosyns, 1999), Czech Republic (Weiss, 1999), England (D. Fischer & Beech, 1999; Grubin & Thornton, 1994), Germany (Pfafflin, 1999), the Netherlands (Frenken, Gijs, & Beek, 1999), and North America (Marshall, 1999). A nationwide survey of sex offender treatment providers in the United States found that more than 75% identified the cognitive-behavioral or relapse prevention treatment model as their primary approach (Freeman-Longo, Bird, Stevenson, & Fiske, 1995). However, there is much heterogeneity in what constitutes cognitive-behavioral or relapse prevention treatment. Almost all of the cognitive-behavioral treatment approaches attempt to treat lack of victim empathy, cognitive distortions, denial or minimization of responsibility, and deviant sexual preferences (Marshall, 1999). Generally, cognitive-behavioral treatment is delivered through group therapy, which is recognized as an appropriate and effective way of delivering sex offender treatment. Sex offenders may more easily manipulate treatment providers to see their point of view in individual treatment (D. Fischer & Beech, 1999).

RELAPSE PREVENTION

Relapse prevention was initially used as a maintenance strategy to keep treated drug addicts, alcoholics, and smokers from returning to their initial substance use (Laws, 1999). Pithers, Marques, Gibat, and Marlatt (1983) adapted the relapse prevention model to address sexual offending. The model begins with sex offenders being committed to abstinence from sexual offending. Sex offenders are then taught about "seemingly unimportant decisions" that can place them in high-risk situations that might provide the opportunity to commit a new sex offense. Seemingly unimportant decisions can include going to restaurants or recreation centers where children gather, keeping catalogs that display children in bathing suits or underwear advertisements, having a fantasy of exposing private parts to women in a public setting, buying pornographic adult magazines, buying a six pack of beer, and so forth.

Some sex offenders can have momentarily "lapses," such as masturbating to deviant fantasies, grooming children, or purchasing pornography; as these examples indicate, lapses involve voluntarily risky sex-related behaviors that can lead to a relapse. A relapse is defined as the commission of a new sex offense. After a "lapse," sex offenders may often experience a feeling of failure and guilt for breaking their abstinence pledge (called an abstinence violation effect [AVE]). If they attribute the lapse to a personal inability to deal with their problems, they have a higher probability of committing a new sex offense. In the relapse prevention model, sex offenders are taught coping skills to deal with high-risk situations and with momentary lapses. The primary goal of these coping skills is to decrease the chances of the commission of a new sex offense.

Several advancements in the relapse prevention model have been made in recent years (see Hudson & Ward, 1996; Johnston & Ward, 1996; Ward & Hudson, 1996, 1998; Ward, Hudson, & Keenan, 1998). For example, it has been expanded to include prevention teams that consist of supportive neighbors, family members, and friends who are informed of a sex offender's high-risk indicators of relapse so that they can help keep the sex offender on track (Pithers, 1999).

Ward and Hudson (1996) have critiqued the relapse prevention model and have noted that the model has three major weaknesses.

First, it fails to address the interactions between high-risk situations, lapses, apparently irrelevant decisions, AVEs, and relapse. Second, it overemphasizes the role of skill deficits compared to explicit decision making in the commission of new offenses. Finally, it does not distinguish between high-risk situations that refer to external situations and those that refer to emotional states. The self-regulation model of relapse prevention has attempted to address these weaknesses (see Hudson & Ward, 1996).

According to the self-regulation model, sexual offending behaviors can occur through the following three distinct pathways: (a) disinhibition, (b) misregulation, and (c) purposeful (Ward et al., 1998). The disinhibition pathway involves sexually deviant urges and acts that result from situational or emotional triggers, such as anxiety, loneliness, low self-esteem, and chance contact with potential victims. Child molesters reported that anxiety, anger, depression, and having actual contact with children triggered sexual fantasies about children (Swaffer, Hollin, Beech, Beckett, & Fisher, 2000). The misregulation pathway involves efforts to control deviant sexual urges through counterproductive strategies, such as masturbating to deviant fantasies, often resulting in offenders having less control and eventually committing sex crimes. Supporting the misregulation or disinhibition pathways, 25% of child molesters in one study reported using drugs, alcohol, or pornography during the 12 hours preceding their last criminal offense (Proulx, Perreault, & Ouimet, 1999). The purposeful pathway involves carefully planning the sex crimes and believing that sexual assaults are appropriate because of apparent attitudes, such as women want to be raped. In the purposeful pathway, sex offenders are likely to experience positive affect or to be frustrated that their goals of deviant sexual contact are thwarted.

BEHAVIORAL TREATMENTS

Several behavioral treatments apply operant and classical conditioning principles to reduce deviant sexual urges, preferences, and fantasies (Heilbrun, Nezu, Keeney, Chung, & Wasserman, 1998; Marshall & Barbaree, 1978). These treatments assume that deviant sexual arousal or fantasies have been formed through experiential learning and reinforcement. Typically, behavioral treatments are

adjunct treatments reserved for sex offenders who express deviant sexual arousal patterns, fantasies, or preferences. For example, covert sensitization involves patients imagining performing behaviors that have led to prior sex offenses and then interrupting this imagery before the offense occurs through imagining an averse consequence such as getting caught. Most of the treatments have been evaluated using single-case designs or studies without control groups (Heilbrun et al., 1998); given these methodological limitations, the effectiveness of behavioral treatment is unknown.

BIOCHEMICAL TREATMENT

California became the first state to enact a law requiring sex offenders convicted twice of molesting a child under 13 years old to take medication designed to lower their deviant sexual urges. Florida, Georgia, and Louisiana have passed similar "chemical castration" laws (Miller, 1998). Miller (1998) provided an overview of the ethical and legal issues surrounding laws mandating the use of drugs to reduce the sex drive of sex offenders. Miller (1998) also suggested that the phrase "'chemical castration' implies a medically inappropriate use of the medication" (p. 183). Prentky (1997) advocates that these laws are inconsistent with maximizing the effectiveness of antiandrogen medication, which requires individually tailored treatment regimens for sex offenders.

Treatment providers, in conjunction with cognitive-behavioral treatment, have used antiandrogen drugs to attempt to suppress sex offenders' sexual urges and deviant sexual arousal. Medroxyprogesterone acetate (MPA) is the most common prescribed drug (Prentky, 1997). MPA has shown some success at reducing symptoms of deviant sexual urges and arousal, but most of these evaluations have not included control groups, have used small samples, and/or have varied a great deal in methodology. Hence, generalization across studies was impossible (Prentky, 1997). Moreover, sex offenders are more resistant to hormonal treatments compared to cognitive-behavioral group therapy. Across studies, 33% to 66% of sex offenders refused hormonal treatment, and 50% discontinued its use because of side effects after beginning treatment, compared with approximately one

third of sex offenders dropping out of cognitive-behavioral treatment (Hall, 1995).

An alternative to antiandrogen drugs is serotonin reuptake inhibitors (SRIs; see Greenberg & Bradford, 1997). Clinical studies have found that antidepressant agents, such as SRIs, cause delayed ejaculation, impotence, and reduced sexual drive in some patients (see Greenberg & Bradford, 1997). SRIs also have fewer side effects than antiandrogen or progesterone treatments. The antiandrogren treatments can be safely prescribed for only short periods of time and can interfere with conventional sexual drive, whereas the SRIs are relatively safe for prolonged use, and conventional sexual drive is preserved in most patients (Greenberg & Bradford, 1997). Greenberg and Bradford (1997) reviewed studies using SRIs to treat nearly 200 sex offenders and concluded that SRIs "have shown favorable treatment responses in paraphilic disorders" (p. 356). These authors call for double-blind crossover studies to yield more definitive conclusions about the effectiveness of SRIs in the treatment of sex offenders.

TREATMENT FOR DENIERS

Treatment providers have much difficulty dealing with sex offenders who deny all involvement in their crimes. Studies do not indicate what percentage of sex offenders are total deniers; one study of 608 sex offenders on probation found that 16.3% completely denied the offense (Stalans, Seng, & Yarnold, 2002). Complete deniers create obstacles to conducting effective group therapy for sex offenders in that they often refuse to participate in the group discussions, are unable to imagine steps leading up to the offense, and refuse to do group assignments that require some admittance to involvement in a sex crime. Treatment providers have attempted to use several individual counseling sessions to break complete denial before integrating these offenders into the group therapy. Other treatment providers allow complete deniers to attend group therapy and discuss their feelings, beliefs, and behaviors before the sex crime, and the other sex offenders in the group challenge the deniers' accounts of the crimes until the deniers acknowledge responsibility for the crime (Marshall, 1994). If these procedures are unsuccessful, two studies have evalu-

ated group therapy modules for treating deniers (O'Donohue & Letourneau, 1993; Schlank & Shaw, 1996). These treatments for deniers may have promise, but the methodological problems in the current evaluations, such as lack of control groups, small sample sizes, and no short- or long-term assessment of sexual recidivism, preclude any conclusions about overall effectiveness of these therapies for complete deniers.

In summary, there are several treatment modalities that can be used to reduce sex offenders' risk of reoffending. Cognitive-behavioral group therapy with a focus on relapse prevention is the most commonly used and has been the focus of most evaluations. Biochemical and pharmacological treatments show promise, but additional research is needed. Behavioral therapies are often used as supplemental therapies to reduce abnormal sexual urges or fantasies but have not been adequately evaluated. A significant proportion of convicted or accused sex offenders completely deny committing any sex crimes and are a particularly difficult group to treat. Several strategies and treatment modalities have been tried with complete deniers and await further systematic evaluation.

EFFECTIVENESS OF RELAPSE PREVENTION GROUP TREATMENT

The following section reviews the effectiveness of cognitive-behavioral (relapse prevention) group therapy, and treatment in this section refers to this approach. Several studies have examined the effectiveness of treatment at reducing recidivism rates in populations of sex offenders (see Furby, Weinroll, & Blackshaw, 1989; Marshall & Pithers, 1994; Quinsey, Harris, Rice, & Lalumiere, 1993). The differences and shortcomings in the research designs of these studies have led to mixed conclusions about the effectiveness of sex offender treatment. Barbaree (1997) noted that most studies designed to assess treatment effects have used samples of 200 or fewer sex offenders and have had insufficient power to detect even moderate treatment effects. According to Barbaree (1997), nonsignificant findings in prior studies provide little information about whether treatment is effective.

An earlier narrative review of 40 studies, which were primarily conducted before 1980, concluded that treatment tends to be ineffective at reducing recidivism (Furby et al., 1989). More recent reviews indicate that treated sex offenders have lower recidivism rates than untreated matched control groups (Alexander, 1999; Hall, 1995; Polizzi, MacKenzie, & Hickman, 1999). Alexander (1999) reported that relapse prevention group therapy approaches yielded recidivism rates below 11% for juveniles, rapists, child molesters, and exhibitionists.

In a meta-analysis, Hall (1995) found that treatment effects were stronger in outpatient settings than in institutional settings. Thus, the effectiveness of prison-based sex offender treatment is less certain than that of outpatient treatment. In a more recent review that considered the quality of the studies, only two of the eight studies on the effectiveness of prison-based sex offender treatment were methodologically sophisticated enough to provide any conclusions (Polizzi et al., 1999). One of the studies found that the treated group had lower sexual recidivism rates than the untreated group (Nicholaichuk, Gordon, Gu, & Wong, 1999), whereas the other study found no difference between the treated and untreated groups (Hanson, Steffy, & Gauthier, 1993).

Since these reviews, Quinsey, Khanna, and Malcolm (1998) compared 213 treated men with 183 men assessed as not needing treatment. The untreated sample was not a comparable control group, because it had a less serious prior criminal history than the treated sample. After attempting to statistically control for pretreatment differences, the treated group had significantly higher sexual and violent recidivism rates than did the untreated group. The authors concluded that this 6-month prison-based sex offender treatment might have a negative effect on recidivism.

To correct for the shortcomings in this design, a recent study compared a small sample of 89 treated sex offenders at the Regional Treatment Centre in Canada with a matched untreated group (Looman, Abracen, & Nicholaichuk, 2000). This study used a sample of the participants in the Quinsey et al. (1998) study but eliminated sex offenders with extensive and serious prior criminal histories who could not be matched with an untreated sex offender and those with unknown

treatment type. The treated group had a significantly lower sexual recidivism rate than the matched untreated group (Looman et al., 2000). The additional 4-year follow-up time and the elimination of the highest risk sex offenders might account for the different findings. Supporting this interpretation, Hall (1995) found that there were greater treatment effects when studies followed participants for 5 or more years.

An evaluation of the Sex Offender Treatment Program in the English and Welsh prisons was recently published (D. Fischer, Beech, & Browne, 2000). The study collected data from 49 incarcerated child molesters. Child molesters who had observed significant change in pro-offending attitudes through treatment maintained their relapse prevention skills at the 9-month follow-up, but child molesters who had not changed their attitudes and had learned relapse prevention skills at the end of treatment had lost their relapse prevention skills at the 9-month follow-up. The authors suggest that relapse prevention training must occur within a framework covering all areas of offending behavior.

Some research has begun to address the question For whom is treatment effective? In a study that randomly assigned sex offenders to treatment or no treatment in the California State Hospital cognitive-behavioral program for sex offenders, findings show treatment benefits on violent recidivism and on sexual recidivism for certain groups of sex offenders (Marques, 1999). This study found that three groups of sex offenders benefited from treatment: child molesters with male victims, child molesters with victims of both sexes, and child molesters who learned relapse prevention training and had five or more prior crimes against children (Marques, 1999).

Conversely, psychopathic deviant sex offenders are unsuitable candidates for sex offender treatment. Research has shown that psychopathic deviants use their charm and manipulation skills in sex offender treatment to obtain good behavior ratings from therapists, but this good behavior and presumed "compliance" with treatment is unlikely to transfer to their conduct outside of treatment. Psychopathic deviants who behaved well in treatment were significantly more likely to commit new serious offenses (Seto & Barbaree, 1999). Hare (1996) also noted that group therapy and insight-oriented programs can actually help psychopaths develop better ways of manipulating and

deceiving people, but the therapies do little to change their lack of empathy or acceptance of responsibility or to reduce sexual or violent recidivism.

CHARACTERISTICS RELATED TO PREMATURE TERMINATION OF TREATMENT

Sex offenders have high rates of either dropping out or being expelled from treatment. Termination rates in the United States outpatient treatment programs have ranged from one quarter to more than one half of adult sex offenders (Geer, Becker, Gray, & Krauss, 2001; Moore, Bergman, & Knox, 1999), and two studies have found that about 50% of juvenile sex offenders failed to complete treatment (Hunter & Figueredo, 1999; Kraemer, Salisbury, & Speilman, 1998).

High termination rates indicate that many sex offenders do not receive the possible benefits of treatment and create other problems. For example, sex offenders who either drop out or are expelled from treatment have much higher rates of recidivism than do sex offenders who complete treatment (Hanson & Bussière, 1998; Marques, 1999; Stalans et al., 2002). Additionally, treatment slots are scarce in many jurisdictions. A national telephone survey of 732 probation and parole supervisors in the United States found that sex offender treatment services were in short supply in 26% of the jurisdictions (Jones et al., 1996). In England, there is only enough capacity in sex offender group treatment programs to handle 53% of the sex offenders supervised by probation services (D. Fischer & Beech, 1999). Research on the predictors of premature termination can help treatment providers develop screening instruments to select individuals that are likely to complete treatment. Furthermore, treatment providers may be able to develop innovative treatment procedures for sex offenders who are likely to be expelled from treatment for noncompliance with attendance and rules. Sex offenders who are at high risk of dropping out may need more structure, guidance, or help with everyday living situations, such as employment and stress management. To determine how to create an effective treatment, it is important to know which offender and offense characteristics predict treatment failure.

Several findings suggest that sex offenders who have long-standing or more entrenched sexual deviance are more likely to withdraw from

treatment. For example, 92% of the offenders who had multiple paraphilias, committed both hands-on and hands-off sex offenses, and molested both boys and girls dropped out of treatment (Abel, Mittleman, Becker, Rathner, & Rouleau, 1988). Other research using the Multiphasic Sex Inventory also has found that adult sex offenders who are defensive about their sexual preferences, have less knowledge about basic sexual anatomy, and have more obsessed sexual thought patterns were less likely to complete treatment (Simkins, Ward, Bowman, & Rinck, 1989). Two other studies have found that incarcerated sex offenders and community-based sex offenders who were sexually abused as children were less likely to complete a prison-based sex offender treatment program than were sex offenders without a history of victimization (Craissati & Beech, 2001; Geer et al., 2001).

Research has shown that psychopathic deviants are less likely to successfully complete outpatient or inpatient treatment programs (e.g., Chaffin, 1992; Moore et al., 1999; Ogloff, Wong, & Greenwood, 1990). One study, however, found no difference between incarcerated psychopathic deviants and incarcerated sex offenders who were not psychopathic deviants (Shaw, Herkov, & Greer, 1995).

Denial of the offense is also associated with premature termination of treatment. Three studies have found that incarcerated adult sex offenders (Geer et al., 2001), adult child molesters on probation (Stalans et al., 2002; Stalans, Seng, Yarnold, Lavery, & Swartz, 2001), and juvenile sex offenders (Hunter & Figueredo, 1999) with higher levels of denial were significantly more likely to drop out of or be expelled from treatment compared to sex offenders who acknowledge their involvement in the offense.

Three basic demographic characteristics—(a) marital status, (b) educational achievement, and (c) employment status—are significantly related to premature termination of treatment. In five studies, sex offenders who were never married had lower rates of successful completion (Abel et al., 1988; Craissati & Beech, 2001; Miner & Dwyer, 1995; Moore et al., 1999; Stalans et al., 2002). Other research also has found that unemployed or part-time employed sex offenders on probation were significantly more likely to be seriously noncompliant with treatment (Maletsky, 1990; Stalans et al., 2002; Stalans et al., 2001). Sex offenders with less educational achievement

were more likely to terminate treatment prematurely than were sex offenders with higher educational achievement (Geer et al., 2001; Stalans et al., 2002; Stalans et al., 2001). It makes intuitive sense that educational achievement predicts success or failure in treatment. Cognitive-behavioral therapy requires clients to be able to reflect back on their behavior, to assess the circumstances surrounding their behavior, and to arrive at conclusions about their sexual assault cycle with the help of a therapist. Offenders without a high school education are often lacking these cognitive skills and often have problems with reading, which makes it difficult to complete homework assignments. Offenders without a high school education also often have poor communication skills and may have difficulty expressing their thoughts and feelings in therapy because they have had less experience with group discussions.

Conversely, two studies found that age, race, educational attainment, socioeconomic class of the offender, and prior number of criminal offenses did not predict success or failure of cognitive behavioral therapy for outpatient sex offenders (see Marshall & Barbaree, 1990; Moore et al., 1999). Social status may have different effects on treatment failure depending on mental health, denial, and substance abuse of sex offenders. Recent research has begun to examine how demographic characteristics combine with other characteristics to predict treatment failure (Stalans et al., 2002). In Stalans et al.'s (2002) study, child molesters who mostly blamed the victim for the offense, lived in poverty, and were 37.5 years of age or younger had a 75% chance of being seriously noncompliant with treatment. In contrast, child molesters who placed most of the blame on the victim but had an annual income higher than $13,500 had only a 24% chance of being seriously noncompliant with treatment. Thus, annual income determined the effect of blaming the victim on sex offenders' treatment noncompliance. Sex offenders living in poverty are at higher risk of failure because they have a difficult time paying for treatment and have less reputation to lose if they are noncompliant with treatment.

Child molesters who accepted all the blame or only partially blamed the victim also were at a very high risk of serious noncompliance with treatment if they used both illicit drugs and alcohol, victimized a stranger or acquaintance, had no prior arrests for sex crimes, and lived in poverty (Stalans et al., 2002). Conversely, sex offenders

that did not or only partially blamed victims, used no substances or only alcohol, had no prior arrests for violent crimes, and had no history of problems with impulsive behavior had a 94% chance of being compliant with treatment. Thus, sex offenders are less likely to be seriously noncompliant with treatment if they have no other mental health problems, such as impulsive behavior, substance abuse, and aggression. Juvenile sex offenders who had problems with impulsive behavior were more likely to be prematurely terminated from inpatient treatment (Kraemer et al., 1998).

In summary, outpatient cognitive-behavioral group therapy has been shown to be effective; however, there are too few studies to draw conclusions about prison-based treatment. Furthermore, several intermediate goals of therapy are achievable. Research has found that treatment can reduce sexual arousal to deviant stimuli or deviant sexual fantasies, increase acceptance of responsibility for the offense, increase empathy for the victim, and increase self-esteem of sex offenders (Dwyer, 1997; Earls & Castonguay, 1989; Marques, Day, Nelson, & West, 1994; Marshall, Champagne, Sturgeon, & Bryce, 1997).[1] However, treatment effects can differ for low- and high-risk sex offenders (Stirpe, Wilson, & Long, 2001), and it appears that sex offenders must grasp an understanding of the relapse prevention techniques for sex offender treatment to generalize to their behavior (D. Fischer et al., 2000). Although treatment can be effective at reducing recidivism for sex offenders that complete treatment (Alexander, 1999; Hall, 1995), a significant percentage of sex offenders are prematurely expelled from or drop out of treatment. Single status, psychopathic deviancy, failure to achieve a high school education, and lower social status are related to being seriously noncompliant with treatment. Research has just begun to address how to combine significant predictors of premature termination to determine the groups of sex offenders that are at high risk of premature termination from treatment.

ASSESSMENT STRATEGIES

Assessment is an ongoing process that both probation officers and treatment providers must undertake because of the fact that assess-

ment results at the beginning of supervision may be inaccurate 3 to 6 months later, especially if social support and environmental conditions change. Research supports that sex offending may be a lifelong problem for many sex offenders. For example, Prentky, Lee, Knight, and Cerce (1997) conducted a longitudinal analysis of recidivism rates among 251 sex offenders who were discharged from the Massachusetts Treatment Center for Sexually Dangerous Persons. The failure rate for having a new sexual offense charge among child molesters at the end of the 25-year follow-up was 52%, with an average of 3.64 years before reoffense. The failure rate for having a new sexual offense charge among adult rapists was 39%, with an average of 4.55 years before reoffense. With such high failure rates, it is important to determine which groups of sex offenders are at a high risk to commit new sex crimes.

Thorough assessments of sex offenders are time-consuming and costly. Thus, professionals must choose what information to gather in a valid and careful manner and what information to gather through self-reports from sex offenders. Treatment providers often choose to use a clinical interview to gather information about sex offenders' childhood behavior and victimizations and their relationship with their parents. This is a wise choice because research shows little relationship between childhood victimization and risk of sexual recidivism (see Hanson & Bussière, 1998), and research also shows that the "experience of childhood sexual victimization is quite likely neither a necessary nor a sufficient cause of adult sexual offending" (General Accounting Office, 1996, p. 3). Most children who are sexually abused do not grow up to be rapists or child molesters (for a review of research, see Prentky & Burgess, 2000).

What information should probation officers and treatment providers gather in a more careful manner using validated objective instruments? Information that is strongly predictive of sexual recidivism or related to serious noncompliance with treatment is worth the cost and effort involved in using more standardized instruments and collateral sources (e.g., interviews with significant others and official records) to document the self-reported information. Key concepts in treatment assessments include deviant sexual preferences, history of sexual offending and polygraph testing, psychopathy, risk of sexual recidivism using formal risk assessments, change in risk of sexual recidi-

vism, denial, cognitive distortions, and empathy; research on these concepts is reviewed.

SEXUAL PREFERENCES

Some theories suggest that deviant sexual preferences are a primary reason that child molesters and rapists commit sexual assault. Supporting these theories, one study found that 52% of the child molesters admitted to fantasizing about children, and 22% indicated that their first deviant sexual fantasies occurred prior to committing their first sex crimes (Marshall, Barbaree, & Eccles, 1991). Furthermore, a recent meta-analysis found that an objective sexual preference for children (having physiological arousal to pictures of children) was the strongest predictor of sexual recidivism (Hanson & Bussière, 1998). Professionals, thus, should assess deviant sexual preferences to plan an individually tailored treatment regimen and to more accurately assess the risk of recidivism.

OBJECTIVE TESTS

Professionals can measure sex offenders' sexual preferences through self-report interviews and an examination of past behavior (called subjective tests) or through assessments of their physiological arousal to visual or audio stimuli depicting different situations/persons (called objective tests). Although information about whether sex offenders are subjectively or objectively sexually aroused to children is very informative, there have been disagreements about whether current measurement procedures have sufficient validity (see Lalumiere & Quinsey, 1994; Marshall, 1999). Overall, a significant percentage of men classified as having a "normal response" are inaccurately classified and actually have deviant sexual preferences (high percentage of false negatives). Conversely, very few individuals are inaccurately labeled as having deviant sexual preferences (few false positives; Quinsey & Lalumiere, 1996).

Two common objective tests employed are called volumetric phallometry and circumferential plethysmography assessment. The volumetric phallometry instrument measures changes in the blood volume in the penis and the circumferential plethysmography mea-

sures changes in the circumference of the penis (i.e., the amount of erection) when offenders view videotapes or slides of nude children and adults. Both tests have adequate validity but have a problem with nonresponders that are not sexually aroused to any of the depictions (Abel, Lawry, Karlstrom, Osborn, & Gillespie, 1994). Moreover, although the volumetric phallometry has better accuracy at classifying sex offenders with sexual arousal to children and might be able to detect smaller physiological changes in the penis, the circumferential plethysmography costs less and is easier to use (Quinsey & Lalumiere, 1996). Both instruments can also be used with audiotape stimuli that vary in the degree of consent between the victim (child or adult) and the perpetrator, the amount of violence and force, as well as consenting sexual contact.

Overall, measures of penile response have high utility with child molesters who victimize strangers or acquaintances (extrafamilial child molesters) but have low utility with incest offenders and exclusively hands-off offenders, such as voyeurs and exhibitionists (Marshall, 1999; Marshall, Payne, Barbaree, & Eccles, 1991). For example, a recent study suggests that deviant sexual preference for children is a much stronger predictor of recidivism for extrafamilial child molesters than for incest or other family member cases (Stalans et al., 2002). Further underscoring the different utility, a significantly greater proportion of incest offenders compared to extrafamilial child molesters have a normal pattern of sexual arousal toward only adult women (Freund, Watson, & Dickey, 1991).

The phallometric assessment is also able to differentiate between homicidal and nonhomicidal child molesters and persons without previous criminal offenses (i.e., nonoffenders). Homicidal child molesters have a significantly higher attraction to sadistic and violent sexual depictions than either nonhomicidal child molesters or nonoffenders (Firestone, Bradford, Greenberg, & Nunes, 2000).

A meta-analysis of studies examining how well phallometric assessments discriminated rapists from non–sex offenders concluded that "rapists as a group, respond more to rape cues than to consenting sex cues in comparison to non–sex offenders, and non–sex offenders prefer consenting sex to rape" (Lalumiere & Quinsey, 1994, p.168). Moreover, the meta-analysis found that stimulus sets containing graphic and brutal rape stimuli and a greater number of rape exem-

plars are most effective at discriminating rapists from non–sex offenders. The rape index from phallometric assessment has also been found to predict sexual recidivism (Rice, Harris, & Quinsey, 1990).

Assessment using penile response has additional threats to its validity. One potential problem is that some sex offenders are able to fake arousal to socially appropriate stimuli and suppress arousal to inappropriate stimuli through controlling their thoughts or mental imagery (Wilson, 1998). One study found that a fast heart rate and erratic breathing may indicate that faking occurred (Wilson, 1998). Another potential problem is that on average, about 20% to 30% of sex offenders have low responses to all stimuli and cannot be classified as having either deviant or normal sexual preferences (Looman, Abracen, Maillet, & DiFazio, 1998). However, some researchers believe that the profile of low responders can be used (see Harris, Rice, Quinsey, Chaplin, & Earls, 1992; Quinsey, Rice, & Harris, 1995). In addition to these methodological problems, researchers have debated whether it is ethical to show sex offenders, especially those in correctional settings, erotic or nude child pornography for the purpose of assessment and treatment.

Another physiological assessment, the Abel assessment, avoids the ethical problems of using pornographic pictures. It measures the amount of time sex offenders spend looking at 160 randomly arranged slides of clothed children and adults of varying ages and sexes that can be classified into 22 categories (e.g., exhibitionism and sexual arousal to latency girls). The plethysmograph and Abel screen have similar classification accuracy for those who have deviant sexual arousal to male adolescents, female adolescents, and male children (Abel, Huffman, Warberg, & Holland, 1998). The Abel screen is particularly efficient at classifying pedophiles who targeted pubescent males but is less sensitive at accurately classifying pedophiles who targeted girls or prepubescent males (Abel et al., 1994). Both the Abel screen and plethysmograph have high internal consistency (Abel et al., 1998), but the test-retest reliability of the Abel has not been assessed (L. Fischer & Smith, 1999). After a review of the research on the validity and reliability of the Abel screen, L. Fischer and Smith (1999) recommended that norms are needed to make the current scores interpretable, additional validity studies should be undertaken on the current test as it is

marketed, and data should verify that the 22 categories are necessary and independent constructs.

SUBJECTIVE TESTS

If an Abel screen, volumetric phallometry, or plethysmograph assessment cannot be performed, treatment providers and probation officers can use self-report measures, although in general, these measures may underestimate the presence of deviant sexual preferences. The most commonly used self-report measures include the Clarke Sex History Questionnaire (Langevin, Paitich, Handy, & Langevin, 1990), the Multiphasic Sex Inventory (Nichols & Molinder, 1984), the sexual interest card sort (Laws, Hanson, Osborn, & Greenbaum, 2000), and the Massachusetts Treatment Center: Child Molester Version 3 Scale (MTC:CM3; Knight, 1992; Knight, Carter, & Prentky, 1989). The Clarke Sex History questionnaire has been shown to distinguish among different types of child molesters (Langevin et al., 1990). The Multiphasic Sex Inventory performs better than the plethysmograph at differentiating child molesters who victimize girls from child molesters who victimize boys (Day, Miner, Sturgeon, & Murphy, 1989). In one study the card-sort technique improved classification accuracy of child molesters above the performance of the plethysmograph using both audio and slide stimuli (Laws et al., 2000). Two studies also suggest that the combination of self-reports and plethysmograph assessment provides the best classification accuracy (Day et al., 1989; Laws et al., 2000). Additionally, treatment providers can assess the extent to which sex offenders are attempting to distort their true sexual preferences to appear more socially appropriate using the Sexual Social Desirability Scale, although further validity and reliability assessment needs to be conducted on this scale (M. McGrath, Cann, & Konopasky, 1998).

The MTC:CM3 assesses the extent to which children have been a major focus of an offender's thoughts and fantasies for at least 6 months. When self-reports are not forthcoming, the individual can be classified as "preoccupied with children" if one or more of the following behavioral criteria are present: "(a) three or more sexual encounters with children over a time period that is greater than 6 months, (b)

evidence that the offender has had enduring relationships with children (excluding parental contact), or (c) the offender has initiated contact with children in numerous situations over his lifetime" (Prentky, Knight, & Lee, 1997, p. 143). Treatment providers and probation officers should typically be able to obtain information about the first behavioral criterion from police reports.

The Screening Scale for Pedophilic interests indirectly assesses pedophilic interests and assigns high risk of sexual interest in children if offenses included male victims, multiple victims, younger victims, and extrafamilial victims (Seto & Lalumiere, 2001). Individuals with the highest scores were 5 times more likely to have pedophilic interest as assessed with phallometric testing than were individuals with the lowest scores on this scale. The authors conclude that this brief scale can be used when phallometric testing is unavailable or difficult to conduct or can serve as an additional measure of pedophilic interest (Seto & Lalumiere, 2001). However, future research will need to determine the extent of its reliability and validity as a measure of pedophilic interest. Moreover, because the measure uses only offense-related characteristics, its usefulness to assess pedophilic interest in incest offenders is quite limited, and it assumes that all extrafamilial child molesters of boy victims have a sexual preference for children. Given the availability of self-report measures to identify pedophilic interests, neither expense nor court objections over the Abel screen or plethysmograph should prevent some assessment of sexual preference for children.

POLYGRAPH TESTING

It has been recommended that specialized sex offender probation and parole programs obtain a fuller disclosure of past sexual offending (English, Pullen, Jones, & Krauth, 1996). Polygraph testing is used to elicit a more thorough disclosure of past sexual offending and to determine if sex offenders are being complaint with treatment and probation conditions. However, it is important for professionals to not rely on polygraph results to terminate treatment, file a violation of probation or parole petition, or determine whether a suspect committed a crime (Blasingame, 1998). The polygraph exams have very high rates of false positives, which is saying someone is lying when they

are actually telling the truth (Quinsey & Lalumiere, 1996). Research has demonstrated that the validity and reliability of polygraph testing is low, and client behaviors and characteristics as well as the experience of the polygraph tester affect the accuracy of the results (Abrams, 1989; Blasingame, 1998). However, if sex offenders believe that the test can detect lies, the polygraph can be used as a surveillance and disclosure tool.

The results of the polygraph should be used as a tool to encourage an open exchange between the professional and client about possible reasons for these results. The result of the polygraph is less important than the additional information that can be elicited from the sex offender with appropriate use of the polygraph tool. Some therapists have used the tool to confront sex offenders' denial of the convicted offense or to confront sex offenders' denial of deviant sexual fantasies or paraphilias. Professionals also use the polygraph to obtain a more comprehensive picture of sex offenders' previous sexual offending. One study of adult sex offenders found that both prison inmates and parolees provided information about a greater number of victims and previous offenses in their first polygraph compared with the information obtained in the presentence report investigation and in the sexual history disclosure form (Ahimeyer, Heil, McKee, & English, 2000). Most offenders were found to be deceptive in the polygraph test, and once confronted with deception, two thirds of the prison inmates and more than one third of the parolees revealed past undetected sexual offending behavior (Ahimeyer et al., 2000).

Blasingame (1998) has suggested several procedures and policies to enhance the validity and usefulness of the polygraph test. First, polygraphers, treatment providers, and probation officers should work together to form the questions. Second, the questions should focus on behavior rather than intent of the sex offender. Third, sex offenders should have guaranteed immunity for admission of new or previous sex offenses, or a system should be in place, such as refraining from obtaining details about the victim, so that mandated reporting is not required. Finally, polygraph tests should not be given to clients who are likely to have invalid tests, such as clients with major psychotic mental illnesses, delusions, lower than average intelligence, and with active symptoms from bipolar depression (Abrams, 1989; Blasingame, 1998).

PSYCHOPATHIC DEVIANCY

Psychopathic deviancy is a term that is often confused with antisocial personality disorder (Shipley & Arrigo, 2001). The two diagnoses, however, are distinct concepts that should not be used interchangeably (Hare, 1996; Shipley & Arrigo, 2001). Individuals with an antisocial personality, as defined by the *Diagnostic and Statistical Manual of Mental Disorders* (4th ed., revised; *DSM-IV-R*), still can feel guilt, shame, and empathize with their victims, whereas psychopathic deviants cannot experience these emotions. Psychopathic deviants are callous, ruthless individuals who can use charm, flattery, and other means, including violence, to get what they want. They are purely self-interested and lack a conscience (Hare, 1996). They feel no guilt or shame and are unable to empathize or feel concern for others. In a review of the literature, between 48% and 79% of rapists and from about 43% to 47% of child molesters were assessed as psychopathic deviants (Knight & Prentky, 1990). Several studies have found that significant proportions of incest offenders (40% to 50%) have elevated psychopathy scores (for a review, see Williams & Finkelhor, 1990). Sex offenders who sexually assault both adults and children have the highest rates of psychopathic deviancy (e.g., Porter et al., 2000). Psychopathic deviance is significantly less prevalent in child molesters than in rapists and non–sex offenders in prison (Porter et al., 2000).

The two standard ways of measuring psychopathic deviancy are Scale 4 on the Minnesota Multiphasic Personality Inventory (MMPI) or Hare's Psychopathy Checklist–Revised (PCL-R). Both scales have good validity and reliability (see Shipley & Arrigo, 2001). The cutoff score for a diagnosis of psychopathic deviancy is typically 30 using the PCL-R, although Hare recommends 35 for offender populations (Hare, 1996). The PCL-R takes several hours to complete and involves an interview with the offender and collateral documentation of the offender's self-reports. Hare has recently developed a short version of the PCL-R called the Psychopathy Checklist: Screening Version, which contains 12 items for use in forensic and offender populations (Hare, 1996).

Psychopathic deviancy, as measured using objective instruments such as the MMPI or the PCL-R, is also a reliable indicator of a higher

risk for sexual recidivism. Psychopathic deviancy has been found to be a strong predictor of sexual recidivism after controlling for background, demographic, and offense characteristics (Harris, Rice & Quinsey, 1998; Quinsey, Lalumiere, Rice, & Harris, 1995). Sex offenders who have high scores on both psychopathy and objective sexual preference to children recidivated sooner and at significantly higher rates compared with sex offenders without this combination (Serin, Mailloux, & Malcolm, 2001). Psychopathic deviants, moreover, have significantly higher deviant penile arousal on the plethysmography test and a greater number of previous offenses against children compared with nonpsychopathic sex offenders (Quinsey et al., 1995). Psychopathic deviancy also increases the risk of nonsexual violent recidivism (see Hare, 1996).

Probation officers, judges, and treatment providers need to be aware of which offenders are psychopathic deviants. Given the high risk of committing new offenses and the probable failure in treatment, judges should consider placing additional restrictions on these offenders, including intensive field surveillance, or sentence these offenders to prison. Given their high risk for recidivism and treatment failure, psychopathic deviants may require more monitoring, more confrontation, more surveillance of their lives in the community, and more follow-up with victims and significant others in an effort to keep these offenders from committing additional harmful sexual and nonsexual crimes.

FORMAL RISK ASSESSMENT INSTRUMENTS

Although criminal justice professionals and researchers believe that incest offenders are at a lower risk to reoffend than other sex offenders (e.g., Furr, 1993; R. J. McGrath, 1991), some research suggests that these offenders are likely to be repeat offenders (Abel et al., 1987; Studer, Clelland, Aylwin, Reddon, & Monro, 2000). Many of the young victims remain silent and are reluctant to report the abuse, creating a false notion that incest offenders have lower recidivism rates. However, in an anonymous survey, 159 incest offenders reported committing 12,927 sexual abuse acts against 286 girls (Abel et al., 1987). These findings suggest that criminal justice profession-

als should carefully evaluate the risk and treatment needs of all sex offenders, including incest offenders.

Researchers have developed several standardized instruments to assess the risk of sexual recidivism. The Rapid Risk Assessment for Sex Offender Recidivism (RRASOR) is the most popular risk assessment tool in the United States and Canada and combines only four characteristics in an additive fashion (Hanson & Thornton, 2000). The RRASOR considers male victim, unrelated victim, prior sex offenses, and being released from prison (or an inpatient secured institution) before the age of 25. One clear shortcoming of the RRASOR is that it relies on only official criminal history and ignores prior, but undetected, crimes that are disclosed to probation officers or treatment evaluators. Certainly, specialized sex offender probation programs that attempt to obtain a full criminal history would achieve better prediction by using all prior detected and self-reported crimes.

The Structured Anchored Clinical Judgement—Minimum Version (SACJ-MIN) has a two-step scoring system (Hanson & Thornton, 2000). The following five characteristics are initially scored: (a) any current sexual offense, (b) any prior sexual offense, (c) any current nonsexual violent offense, (d) any prior nonsexual violent offense, and (e) four or more previous sentences. If offenders have four or more of these five factors, they are considered high risk. In the second step of the SACJ-MIN, an offender's initial risk assessment is raised one category higher if he has two or more of the following eight characteristics: (a) any stranger victims, (b) any male victims, (c) never married, (d) convictions for hands-off sex offenses, (e) substance abuse, (f) placement in residential care as a child, (g) deviant sexual arousal, and (h) psychopathy.

The Static-99 is a combined scale of the RRASOR and the SACJ-MIN and has better predictive accuracy than the RRASOR or the SACJ-MIN alone (see Hanson & Thornton, 2000). As its name indicates, it includes only static variables and was developed in 1999. It considers the following 10 risk factors: (a) four or more prior sentencing dates, (b) any convictions for noncontact sex offenses, (c) current index nonsexual violent offense, (d) prior nonsexual violence arrests, (e) any unrelated victims, (f) any stranger victims, (g) any male victims, (h) being between the age of 18 to 24 at the time of arrest, (i) never lived with lover for at least 2 years, and (j) prior sexual history.

Additional research is needed to determine the accuracy of these instruments in assessing the risk of sexual recidivism while on probation and in the long term. It is important to note that all of these formal risk instruments also should not be used to select treatment targets, measure change, or predict under what circumstance sex offenders will recidivate (Hanson & Thornton, 2000).

All of these formal risk assessment tools assume that the risk characteristics are combined in a linear fashion. Additionally, much of the research has used samples that included extrafamilial child molesters, adult rapists, and incest offenders; some research (Firestone et al., 1999; Firestone et al., 2000) suggests that extrafamilial child molesters and incest offenders may have different risk characteristics associated with recidivism. Researchers should determine the most optimal way to combine risk characteristics to provide the best overall accuracy in classification (Hanson & Bussière, 1998). Instead of assuming that significant predictors should be added together, one study examining predictors of sexual recidivism in sex offender samples (Stalans et al., 2002), one prior study examining predictors of general recidivism in a sex offender sample (Stalans et al., 2001), and two other studies examining recidivism in other populations (Silver, Smith, & Banks, 2000; Steadman et al., 2000) have conducted nonlinear classification tree analyses (CTA) to identify the low-, medium-, and high-risk groups. CTA represents a major advancement over previous studies on recidivism in that it explicitly tests how significant predictors should be combined. CTA shows better performance in classifying offender populations into low- and high-risk groups on recidivism (Silver et al., 2000). CTA via optimal discriminant analysis (ODA) has been shown to have better predictive and classification accuracy than alternative linear (logistic, discriminant analysis, or stepwise ordinary lease squares [OLS] regression) and nonlinear (CHAID or CART) statistical classification methodologies (Yarnold, 1996; Yarnold, Soltysik, & Bennett, 1997).

Steadman et al. (2000) asserted that the CTA approach provides a better representation of how clinicians typically make risk judgments. It might also more closely represent how probation officers think about which offenders are more at risk of sexual recidivism. Furthermore, most prior research has never assessed the stability of their prediction models (Hanson & Bussière, 1998). The two prior studies

using CTA analysis via ODA to predict sexual or general recidivism assessed the stability of their predictors using leave-one-out validity analysis[2] and conducted efficiency analyses to determine whether the models performed the same with different percentages of sexual or other criminal recidivism (Stalans et al., 2002; Stalans et al., 2001).

In a sample of 208 sex offenders on standard or specialized sex offender probation, which included sex offender treatment, objective sexual preference toward children was the strongest predictor of the entire sample and began the classification tree (Stalans et al., 2002). The CTA findings indicated an interaction between deviant sexual arousal to children and offender's relationship to the victim. Of the offenders with a sexual preference for children, 85% of those who victimized strangers or acquaintances and 29% of those who victimized family members committed sexual recidivism. When sexual preference for children was unknown or nonexistent, at least one prior arrest for misdemeanor crimes was the strongest predictor of sexual recidivism. In addition, single or divorced men with access to children also had a moderately high chance of committing a new sex crime. Prior research has found that single marital status was a significant, but modest predictor of sexual recidivism (Hanson & Bussière, 1998), and these findings indicate that single or divorced status is a more powerful risk predictor when there is access to children. Single or divorced men also were at a moderately high risk of sexual recidivism if they completely denied the offense. Denial has been an inconsistent predictor of sexual recidivism, but these findings suggest that it is a risk predictor for single and divorced men.

In a sample of 478 child molesters, an eight-variable CTA model predicting sexual recidivism showed strong performance (Stalans et al., 2002). Child molesters with sadistic, aggressive, or psychopathic tendencies had a 36% chance of committing a new sex crime, and if they were noncompliant with treatment, they had a 65% chance of sexual recidivism. Child molesters who had an interest in hands-off offending (e.g., voyeurism or exhibitionism) and had three or more counts brought against them in the original indictment had a very high chance of sexual recidivism if they were younger than 35.5 years and a very low chance of sexual recidivism if they were 36 years of age or older. Offenders had a very low chance of sexual recidivism if they had no need for substance abuse treatment and scored low or medium

on the Static-99. In this model, the three most important risk characteristics were (a) having sadistic, aggressive, or psychopathic tendencies; (b) substance abuse treatment; and (c) interest in hands-off offending. Stalans and colleagues tested five other CTA models and combined the CTA models into a risk assessment instrument through identifying the subgroups at medium and high risk in each of the CTA models and creating a staging system called the Risk Assessment Tool of Sexual Recidivism (RATS-R). Offenders were classified as high risk if they victimized a stranger or acquaintance and have one of these following characteristics: (a) sexual preference for children, (b) attracted to or victimized both boys and girls, and (c) two or more sexual paraphilia and an interest in hands-off sexual offending. Offenders are also classified as high-risk if there is (a) noncompliance with treatment and a history of sadistic or extremely aggressive/violent acts or sadistic sexual fantasies or psychopathic deviancy or (b) two or more sexual paraphilia and an interest in hands-off sexual offending and at least one prior conviction.

ASSESSING CHANGES IN RISK OF RECIDIVISM

It is important to understand which changeable aspects of offenders' behaviors (e.g., mood or sexual preoccupations) are related to an increased risk of sexual recidivism. Probation officers and treatment providers can benefit greatly from knowledge about the changeable indicators that suggest sex offenders might be on the verge of committing a new sex crime. One study has begun to explore this critical issue. Hanson and Harris (2000) attempted to determine the changeable characteristics of sex offenders that predicted recidivism. They designed a retrospective study and interviewed probation officers about a sample of sex offenders who had recidivated while on probation and a sample of sex offenders who had not recidivated to assess potential predictors of sexual recidivism. They found that recidivists compared with nonrecidivists showed increased anger, were more often disengaged from or uncooperative with treatment and community supervision, missed scheduled appointments, attempted to deceive the officers, and had more stable sexual preoccupations. The researchers also coded the case notes of probation officers that are recorded after each meeting with a sex offender. From these codings,

they found that (a) access to victims, (b) failure to acknowledge recidivism risk, (c) increased signs of sexual preoccupations and deviance, and (d) increased anger differentiated recidivists from nonrecidivists even after controlling for significant demographic, offense, and criminal history characteristics.

Hanson and Harris (2001), using this same data set, developed the Sex Offender Need Assessment Rating (SONAR) scale to evaluate changes in risk. The SONAR contains five factors that change slowly: intimacy deficits, negative social influences, attitudes that are tolerant of sexual offending, self-regulation of sexual urges, and general self-regulation of other behaviors. It also contains four acute risk factors that can change relatively quickly: substance abuse, negative mood states such as depression and anxiety, anger or hostility, and opportunities for access to victims. The scale showed moderately high performance in classifying recidivists and nonrecidivists even after controlling for other risk assessment scales, age, and IQ level. These results suggest that the SONAR improves the classification of established formal risk assessment, such as the Static-99 for short-term recidivism. The acute risk factors in the scale are useless predictors for long-term sexual recidivism if probation or parole officers or treatment providers have not been monitoring the sex offenders' behavior and have no recent knowledge of these factors. Future studies should determine whether noncompliance with treatment should be given more importance in this scale. Moreover, future studies will need to examine whether different groups of sex offenders vary in the changeable factors that are linked to their sexual recidivism. For example, acute predictors might be more predictive of sexual recidivism in mentally ill offenders with depression, whereas the stable changeable predictors might be more predictive of pedophiles' sexual recidivism because they often plan their sexual offenses more carefully. CTA is a useful tool to examine which parts of the SONAR are most informative for different groups of sex offenders.

DENIAL

Although a recent meta-analysis found that pretreatment denial was unrelated to sexual recidivism, it did find that individuals who

completed treatment had significantly lower recidivism rates than individuals who were prematurely terminated or dropped out of treatment (Hanson & Bussière, 1998). Offenders who deny involvement in the offense are less amenable to treatment and are less likely to complete treatment (Hunter & Figueredo, 1999). In one sample of probationers, sex offenders who denied the offense or blamed the victim, victimized strangers or acquaintances, or had extensive criminal histories had more than a 70% chance of treatment failure (Stalans et al., 2002). These findings suggest that denial might have indirect effects on sexual recidivism by increasing the likelihood of failing to complete treatment. Methodological weaknesses of prior studies, such as overly narrowed measures of denial or subjectively rated denial from clinical records, make it difficult to assess the true relationship between denial and sexual recidivism (Lund, 2000).

Denial is a multifaceted construct with several related dimensions (Schneider & Wright, 2001). The Facets of Sexual Offender Denial (FoSOD) is a recently developed scale that measures six distinct aspects of denial: (a) denial of the sexual offense or harming the victim, (b) claims that the victim wanted or seduced the offender, (c) attributing responsibility for the offense on external factors such as stress or alcohol use, (d) minimizing the extent of the sexual offending, (e) denying that the sexual offense was planned, and (f) denial of the possibility of sexual deviancy or relapse (Schneider & Wright, 2001). This scale has good construct validity and predictive validity in that it discriminated between sex offenders in the early stages of treatment and sex offenders in advanced stages of treatment (Schneider & Wright, 2001).

COGNITIVE DISTORTIONS

Sex offenders often misinterpret situations in a distorted manner, which can lead to sexual offending. For example, a sex offender might interpret a child's plea to play as seductive behavior and a desire for sexual contact. Sex offenders also hold beliefs that might justify or minimize their sex crimes. Relapse prevention or cognitive-behavioral therapy aims to correct these cognitive distortions. To assess the presence of cognitive distortions and determine whether

treatment has successfully corrected cognitive distortions, treatment providers can use standardized measures that assess the vast majority of cognitive distortions. There are several measures that have been validated, including the Abel and Becker Cognitions Scale, the Burt Rape Myth Scale, the Cognitive Distortions/Immaturity and Justification Scales of the Multiphasic Sex Inventory, the Molest scale, the Rape scale, and the Child Molester Scale (see Bumby, 1996; McGrath, Cann, et al., 1998). Two recent scales, the Molest scale and the Rape scale have high internal consistency, high test-retest reliability over a 2-week period, and low general socially desirable response bias (Bumby, 1996). The Child Molester scale can discriminate among convicted sex offenders promised anonymity, nonsexual offenders, and university students, but it shows some social desirability response bias (McGrath, Cann, et al., 1998).

EMPATHY TOWARD VICTIMS

Pithers (1999) noted that empathy-enhancing interventions are a critical component of relapse prevention treatment and may motivate sex offenders to use their acquired coping skills to prevent further sex crimes. Empathy-enhancing interventions can increase sex offenders' empathy toward their victim (McGrath, Cann, et al., 1998; Pithers, 1999). However, most measures of empathy assess general empathy rather than empathy toward sexual assault victims (for a review of this literature, see Pithers, 1999). Two scales have been developed to measure empathy toward sexual abuse victims (see Marshall & Pithers, 1994; McGrath, Cann, et al., 1998). Additional research must assess the reliability and validity of these measures.

In summary, there are several critical factors that probation officers and treatment providers need to assess to have a more complete understanding of sex offenders' risk and treatment prognosis. Sexual preferences and psychopathic deviancy should be assessed using objective measures because they are central predictors of recidivism risk. CTA analyses and the measurement of acute risk factors promise to provide further advancements in risk assessment. In the last 5 years, researchers have also created self-report measures to assess denial, empathy, and cognitive distortions. Such measures can provide critical information about sex offenders' progress in treatment.

EVALUATIONS OF PROBATION PROGRAMS AND RECIDIVISM

Despite the potential for a high failure rate, convicted sex offenders often receive a term of community-based probation as their sentence. Moreover, many child molesters, especially those who molest young children, can receive standard probation as part of a plea agreement stemming from the weakness in the evidence or the desire to avoid putting children through a trial (Greenfeld, 1997). Many jurisdictions now acknowledge that standard probation provides insufficient monitoring and surveillance of convicted child molesters (Lurigio, Jones, & Smith, 1995).

Jurisdictions across the nation have developed specialized sex offender probation programs as an alternative to standard probation. These specialized programs are based on the containment approach, a nationally recognized intensive supervision, community-based probation and parole model for sex offenders. The major goal of the containment approach is to keep sex offenders from committing new sex crimes while in the community through a team effort involving treatment, probation, police, and polygraph professionals (English et al., 1996). The containment approach has three major components: (a) intensive supervision of offenders, which includes frequent office contact, polygraph testing, field searches of offenders' homes, and verification of information obtained verbally from offenders; (b) treatment that emphasizes a cognitive-behavioral and relapse prevention group therapy approach; and (c) a partnership between probation officers and treatment providers that includes frequent communication and sharing of relevant information on specific offenders. There have been several innovative probation strategies that have never been adequately evaluated for effectiveness. For example, in Arizona, one study that had no comparison group, found that sex offenders on lifetime probation had a sexual recidivism rate of only 1.5% per year (as cited in La Fond, 1998). In Canada, an intensive supervision unit oversees high-risk sex offenders on parole. In this model, parole officers, treatment providers, and the program director attend monthly case conferences. Sex offenders are required to participate in both individual and group cognitive-behavioral treatment (Wilson, Stewart, Stirpe, Barrett, & Cripps, 2000). This program also has a low recidi-

vism rate of 3.7% for a 3-year period. Although these strategies show promise, future research should evaluate such programs using a more rigorous design. This section is a review of studies that have used a comparison group and evaluated probation programs or specialized treatment in combination with probation supervision.

GROUP THERAPY COMPARED TO INTENSIVE SUPERVISION

In the only study of its kind, Romero and Williams (1983) used random assignment of sex offenders to either group psychotherapy treatment or intensive supervision probation to evaluate whether treatment reduced recidivism over a 10-year period. The study found no differences in recidivism rates between the two groups even when specific groups of offenders (i.e., rapists, child molesters, or exhibitionists) were examined. However, this study examined only the simple proportions of recidivism and did not adjust for amount of time to the first new sex crime or the amount of time in follow-up. Given its methodological weaknesses and the changes in sex offender treatment, Romero and Williams's findings have little relevance to probation and treatment strategies of the 21st century.

JAIL TIME COMPARED TO PROBATION WITH MANDATORY TREATMENT

Berliner, Schram, Miller, and Milloy (1995) examined recidivism rates of offenders who received a suspended jail sentence with those who were required to serve a probation term with mandatory treatment. Results showed that 44% of probationers violated at least one of their conditions of probation, and 17% had their probation revoked. The most common violation was failure to participate in treatment, followed by noncompliance with financial obligations and new arrests. Offenders who were sentenced to the program were less likely to be rearrested for sex offenses during the first 2 years compared with offenders who served only jail time.

VERMONT SPECIALIZED TREATMENT

A study conducted in Vermont examined 122 adult male sex offenders on probation. All were Caucasian and most (84%) were rap-

ists, incest offenders, or extrafamilial child molesters with female victims. The average time at risk was a little more than 5 years, and 19% of the sex offenders were arrested for a new criminal offense of any kind, with 7% arrested for new sex crimes (McGrath, Hoke, & Vojtisek, 1998). The study compared the recidivism and probation outcomes of sex offenders placed on specialized probation and treatment with sex offenders placed on standard probation and treatment.

The specialized treatment/probation group differed from the standard group in two important ways. First, the specialized group received cognitive-behavioral sex offender group therapy once per week for 2 hours (an average of 45 months in treatment) and some form of behavioral treatment to control, reduce, or eliminate deviant sexual arousal. Conversely, the standard group received only individual therapy and no forms of behavioral treatment to reduce or eliminate deviant sexual arousal. Second, in the specialized group, probation officers and treatment providers had a strong partnership, with, at the minimum, weekly telephone conferences and bimonthly meetings with other criminal justice representatives. In comparison, there was no partnership between probation officers and treatment staff, resulting in lack of communication about missed treatment sessions or high-risk behaviors.

The specialized treatment group compared to the standard treatment group had significantly lower rates of arrest for new sex crimes and arrests for any crime. The two treatment groups did not differ on the number of probation violations when new arrests were not included. These findings suggest that the combination of specialized outpatient cognitive-behavioral group therapy, behavioral techniques to reduce deviant sexual arousal, and a strong partnership between therapists and probation officers is one effective approach for monitoring sex offenders on probation.

SPECIALIZED SEX OFFENDER PROBATION COMPARED TO STANDARD PROBATION

Three counties in Illinois implemented specialized sex offender probation programs based on the containment model as described earlier. Each county emphasized different components of the containment model, and all counties struggled with meeting their field sur-

veillance standards (Seng, Stalans, Yarnold, & Swartz, 2000). Therefore, some attention should be given to the optimal ways of meeting field visit standards. Separate surveillance officers and partnerships with home confinement units are two approaches that may provide the needed flexibility to balance office and field contacts (Stalans et al., 2001). All counties also varied in the quality of their treatment evaluations, which suggests that probation departments should set standards for what must be included in a treatment evaluation so that all treatment providers meet the minimal quality level and include assessments of objective sexual preferences, psychopathic deviancy, and formal risk of sexual recidivism.

In addition to the evaluation of how well the programs implemented their specialized probation, Stalans et al. (2002) evaluated the effectiveness of the specialized probation programs using a quasi-experimental design that compared samples of sex offenders in specialized programs with those on standard probation in each county. Before discussing the effectiveness of these programs, a brief description of the programs' components is needed. Both the Lake County and DuPage County standard and specialized probation programs had established partnerships between treatment providers and probation officers who shared information about offenders and both delivered the same treatment (Stalans et al., 2002). Participation in treatment was also mandated by the court for all sex offenders; thus, treatment effectiveness was not the focus of their evaluation. Instead, the effectiveness of increased supervision was the issue. The standard probation programs in Lake and DuPage Counties averaged two office contacts for each offender per month and one field visit once every 2 months, and in each specialized program, these supervision standards were substantially increased but in different ways. The Lake County Specialized Sex Offender Program had two surveillance officers who were devoted full time to community supervision and surveillance activities. The specialized program averaged four face-to-face contacts with each sex offender per month, with approximately two of these contacts occurring in the field or at the offender's home. In the specialized program in DuPage County, two probation officers carried only sex offender cases and averaged 43 cases per officer. Probation officers averaged three office contacts per month for each offender and announced visits to offenders' homes for higher risk cases. The

specialized program also required a full-disclosure polygraph and maintenance polygraphs before moving to lower levels of supervision, whereas the standard program did not.

The researchers coded information for samples with slightly more than 100 offenders in both the specialized and standard programs in each county. Each sample averaged approximately 2 years on probation (Stalans et al., 2002). The evaluators noted that specialized sex offender programs are designed to produce two opposing effects. First, specialized sex offender probation programs should be able to detect a higher number of offenses than standard programs. For example, in examining sex offenders' computers, probation officers may discover child pornography, or during a home visit, they may discover illegal drugs or contact with minors. The higher detection effect, of course, is directly opposite to the effect that deterrence should produce. The deterrence hypothesis predicts that the specialized programs will have lower rates of recidivism than the standard programs.

Stalans et al. (2002) noted that the two opposing forces of higher detection and greater deterrence may result in the standard and specialized probation samples having no observable difference on recidivism. Because the higher detection effect can obscure support for the deterrence process, these researchers using the deterrence theory proposed to identify subgroups of sex offenders that would likely be deterred by increased monitoring and subgroups of sex offenders that would continue with their normal offending behavior despite increased restrictions and surveillance. The deterrence hypothesis requires that sex offenders engage in a rational calculation of their chance of being caught and punishment in their decision making about whether to commit a new offense. Because sex offenders interested in voyeurism and exhibitionism rarely have deviant sexual preferences and are motivated to commit these offenses because of the excitement and the low risk of being caught (Marshall, Payne, et al., 1991), Stalans et al. (2002) proposed that sex offenders interested in hands-off sexual offending would have a lower rate of sexual recidivism in the specialized program compared to the standard program. This hypothesis was supported in the Lake County sample for sexual, violent, and general recidivism but did not receive support in the DuPage County sample for any measure of recidivism. Analyses indicated that sex offenders in the specialized program who were inter-

ested in hands-off sexual offending were less rational in their sexual offending and more driven by compulsive or impulsive behavior compared to these offenders in the standard program. DuPage County hands-off sex offenders in the specialized program were more likely to have two or more sexual paraphilia, to have a current mental health problem, and to have committed sexual offending for a longer period of time than their counterparts in the standard program. Lake County hands-off sex offenders were similar in the specialized and standard program and much less likely to have mental illness or sexual paraphilia. The difference in these subgroups of sex offenders interested in hands-off sexual offending as well as the weaker surveillance of the DuPage County program may account for the lack of a deterrence effect in the DuPage County program.

The research team (Stalans et al., 2002) proposed and found that mentally ill sex offenders, psychopathic deviants, and sex offenders with sadistic tendencies had a significantly higher sexual and violent recidivism rate in the Lake County specialized program than in the Lake County standard program. Stalans and colleagues suggested that these groups of sex offenders do not make rational decisions and cannot be deterred, but the specialized program with its increased surveillance and monitoring is better able to detect the new sex crimes and is a better choice for these groups of offenders. In DuPage County, there were significantly higher sexual recidivism and general recidivism rates in the specialized program than in the standard program. The higher recidivism rates reflected that the maintenance polygraphs in the DuPage County specialized program were successful at obtaining information about new sex crimes. Twelve offenders, during or after failing a maintenance polygraph test, admitted to committing a new sex crime of public indecency, fondling of children, or indecent solicitation of a child. When self-reported recidivism from the maintenance polygraph was removed from the recidivism measures, the specialized and standard DuPage probation programs had similar sexual and general recidivism rates, suggesting that higher detection accounted for the finding.

In the third specialized sex offender probation program, the evaluators assessed how a more structured treatment program, greater monitoring, and restrictions affected recidivism rates of primarily felony child molesters. The Winnebago County Specialized Sex Offender

Program differed from the standard probation program in three ways. First, the specialized sex offender program had much more structured treatment in which the probation officer served as a coleader in the group therapy. Sex offenders were made aware that probation officers and treatment providers were partners who had frequent contact and shared information about offenders. Second, the specialized sex offender program had more frequent monitoring of sex offenders through increased office contacts and monthly field visits to the offender's home. Third, sex offenders in the specialized program more often had court orders to stay away from minors.

Stalans et al. (2002) hypothesized and found that the Winnebago program was particularly more effective than standard probation for offenders who have served a prior period of probation and those with prior mental health or drug treatment. Offenders with a history of mental health or drug treatment had a lower rate of sexual recidivism in the specialized program than in the standard probation program. This finding does not contradict the Lake County finding that those with a current mental health problem had a higher rate of sexual and general recidivism in the specialized program compared to the standard program. The Winnebago program deals with offenders that have either voluntarily attended or been forced to attend treatment previously. Moreover, Winnebago does not have adequate field surveillance to catch all offenders that commit new crimes.

In the Winnebago program, sex offenders with a prior period of probation had significantly lower general and violent recidivism rates in the specialized program than in the standard program. These findings suggest that the increased monitoring, increased requirements, and more structured treatment, especially a partnership between probation officers and treatment providers, were beneficial for two traditionally high-risk groups. The importance of the partnership between probation officers and treatment providers in enhancing treatment effectiveness also has been found in other studies (McGrath, Hoke, et al., 1998; Turner, Bingham, & Andrasik, 2000).

In summary, these evaluations of specialized probation programs have suggested some key components that increase the effectiveness of these programs. All specialized probation programs should be based on the containment approach and should include (a) at least three unannounced random field visits per offender every month, (b) a

full-disclosure polygraph and maintenance polygraph exams every 6 months, and (c) a tight partnership between probation officers and treatment providers that includes probation officers appearing at random times at the treatment site to check on offenders' attendance. Given the many demands on probation officers' time as well as budgetary constraints, departments that need to prioritize resources perhaps should emphasize field visits and a strong partnership between probation officers and treatment providers. Under budgetary constraints, maintenance polygraph exams perhaps should be reserved for the high-risk sex offenders. Future research is needed to address which components of the specialized programs are important in keeping sex offenders from committing new sex, violent, or other crimes.

IMPLICATIONS FOR PRACTICE AND FUTURE RESEARCH

In the last 7 years, research on the effectiveness of probation and treatment strategies has begun to make important strides. Instead of addressing whether a probation or treatment strategy is effective, researchers (Marques, 1999; Stalans et al., 2002) have addressed the question, Which group of sex offenders is more likely to benefit from these treatment and probation strategies? For example, Stalans et al. (2002) used a conceptual framework based on the deterrence literature about which groups of sex offenders are most likely to be deterred to predict when specialized and more intensive supervision probation will reduce sexual, violent, and general recidivism rates and when such a strategy will detect higher rates of offending. Mentally ill, psychopathic deviant, and sadistic sex offenders are not deterred by increased monitoring and surveillance, though specialized programs are better able to detect additional sex crimes. Prison or an institutionalized setting might be a better choice for these subgroups of sex offenders when further noncompliance is detected. Evaluations of specialized sex offender probation programs based on the containment approach (Stalans et al., 2002) indicate that these programs show some promise at reducing recidivism while on probation, especially for traditionally high-risk groups such as those interested in

hands-off sexual offending or those with prior mental health or drug treatment.

Additional research examining other probation strategies should employ Stalans et al.'s (2002) deterrence framework to make additional predictions of which groups are most likely to benefit from specialized probation. For example, employed offenders in skilled or professional jobs and offenders with an established stable relationship with an adult partner might be more likely to be deterred because they have more to lose if noncompliance is detected. Additional research will need to determine the specialized probation's effect, if any, on long-term recidivism and which components of the specialized program are most beneficial. Partnerships between probation officers and treatment providers and unannounced field visits are two strategies that may be effective at reducing recidivism. Additional attention also should be given to the benefits and detriments of having probation officers observe group therapy sessions of their probationers and whether probation officers should be silent observers or occasionally coleader of sessions. Some possible benefits include (a) sending a strong message that treatment providers and probation officers are partners that share all information about the case, (b) keeping probation officers more deeply informed about the progress of their probationers, and (c) helping therapists handle disruptive sex offenders. Some disadvantages, however, might include probationers being less willing to disclose in front of their probation officers and that sex offenders not on probation will feel an invasion of privacy.

Several questions remain unanswered about sex offender treatment. What are the best methods to engage deniers in treatment? Which behavioral treatments, if any, are most effective for incest offenders, extrafamilial child molesters, and rapists? What are the defining characteristics that identify sex offenders who benefit from relapse prevention treatment or hormonal or biochemical treatment? Which subgroups of sex offenders are mostly likely to be prematurely terminated from treatment? Future studies also will need to continue to develop formalized assessment instruments to predict sexual recidivism. CTA is an appropriate statistical tool to identify sex offenders at high risk of sexual recidivism and from which formal assessment instruments can be developed and refined. CTA can provide sophisti-

cated answers to which sex offenders are most likely to make progress in treatment and which sex offenders are most likely to be prematurely terminated. The future of sex offender research is ready to address more sophisticated and practical questions.

NOTES

1. Firm conclusions about the ability to achieve intermediate treatment goals are difficult to draw because the studies suffer from flaws in their design. For example, a control group who received no treatment but completed the pretest and posttest interviews and a treatment group who completed only the posttest interview would have enhanced the design of these studies and ruled out alternative explanations for the significant findings.

2. Leave-out-one validity analysis is a statistical procedure where classification for each observation is based on all data except the case that is being classified.

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